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10/522,196	01/24/2005	Paolo Zebelloni	ZEBE3001/JEK	1481
23364	7590	07/27/2007	EXAMINER	
BACON & THOMAS, PLLC			SORRELL, ERON J	
625 SLATERS LANE			ART UNIT	PAPER NUMBER
FOURTH FLOOR			2182	
ALEXANDRIA, VA 22314			MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/522,196

Applicant(s)

ZEBELLONI ET AL.

Examiner

Eron J. Sorrell

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on preliminary amendment filed 1/24/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/24/05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3-5 and 8 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Referring to claim 3, the applicant sets forth three states and describes the states and being supplied or partially supplied, or not supplied, but the claims do not indicate what is being supplied. For example, data or power could be what is supplied. From the context of the claims it appears that the limitations should read "supplied with power," and this is how the claim will be interpreted by the Examiner, however appropriate correction is required.

4. Claims 4,5, and 8 are rejected based on their dependency on claim 3.

Art Unit: 2182

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1,2,6-9, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Canada et al. (U.S. Patent No. 5,854,994 hereinafter "Canada").

7. Referring to claim 1 and 12, Canada teaches an architecture and method for the centralized control of events occurring in correspondence with remote peripheral electronic devices, comprising:

at least one electronic central device (see item 6 in figure 1 and figure 4 which is a detailed diagram of the central device), said electronic central device including a processing unit or CPU, a transmitting unit, a receiving unit and a power supply unit (see figure 6 and paragraph bridging columns 7 and 8, the power supply is not explicitly set forth, however the limitation is deemed inherent to the system as Canada discloses

Art Unit: 2182

the central device being a personal computer which necessarily comprises a power supply);

at least a device for generating a network timing signal (see lines 9-14 of column 7);

at least one electronic peripheral device (see item 4 in figure 1 and figure 3 which is a detailed diagram of the peripheral device), said peripheral device being provided with a processing unit or CPU (item 420 in figure 3), a storage unit (item 422 in figure 3), a transmitting unit and a receiving unit (item 430 disclosed as a transceiver), a device for generating a local timing signal (see item 424 in figure 3), a battery (see item 438 in figure 3) and means for periodically interrupting and activating the electronic power supply to this transmitting and/or receiving unit (see lines 28-46 of column 6);

wherein said at least one peripheral device is programmable by means of a flow of data autonomously output from said central device and received by said at least one peripheral device (see lines 21-28 of column 7).

8. Referring to claims 2 and 13, Canada teaches wherein means are provided for enabling the autonomous transfer to said peripheral device from said central device of a flow of information which can be is received by said receiving unit in

Art Unit: 2182

said peripheral device, said means for enabling the autonomous transfer of a flow of information including a synchronization loop of turn-on and turn-off slots of the transmitting/receiving units of said peripheral device with respect to the network timing signal and a data transfer loop from said central device to said peripheral device (see lines 9-41 in column 7).

9. Referring to claim 6, Canada teaches the peripheral device is a wireless device (see lines 50-55 of column 2) and wherein said transmitting unit and said receiving unit are a transmitting radio unit and a receiving radio unit, respectively (see lines 9-15 of column 3).

10. Referring to claim 7, Canada the supply unit of said central device and/or of said peripheral device includes a battery (see lines 24-32 of column 3, note Canada teaches at least the peripheral device includes a battery).

11. Referring to claim 8, Canada teaches the central device is a personal computer (see lines 1-6 of column 8). Personal computers have a power supply which connects to an AC outlet which is to either a public or private power supply network (or company).

Art Unit: 2182

12. Referring to claim 9, Canada teaches the device for generating a network timing signal is integrated in said central device (see lines 9-13 of column 7).

13. Referring to claim 11, Canada teaches the receiving and transmitting radio units are caused to communicate to each other at varying frequencies belonging to a group of predetermined frequencies chosen according to a sequence which is predetermined and common to all devices, and wherein said synchronization loop is carried out by utilizing always the same recovery frequency (rf) from this group of frequencies (see lines 9-15 of column 3).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2182

15. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canada in view of Chien et al. (U.S. Patent No. 5,627,882 hereinafter "Chien").

16. Referring to claim 3, Canada teaches the system of claim 1 and the method of claim 12 as shown above. Canada further teaches that at least the peripheral device has a "sleeping state" wherein the transmitter and receiver are not supplied with power and an active state wherein both the transmitter and receiver are supplied with power.

Canada fails to teach the peripheral device has a passive mode wherein the receiving unit is supplied and the transmitter is not supplied.

Chien teaches, in a system wherein a remote peripheral communicates with a central device, the above limitation (see paragraph bridging columns 4 and 5).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Canada with the above teachings of Chien. One of ordinary skill in the art would have been motivated to make such modification in order to be able to receive data, while still reducing battery usage as suggested by Chien (see lines 20-26 of column 3).

17. Referring to claims 4 and 5, as shown above, Canada teaches the sleeping state and the active state. Canada further teaches periodically switches between the two states at a frequency being determined by the local timing signal and by the reception of data flows (see lines 17-27 of column 6).

Canada fails to teach the passive state and switching between the passive state and active state at a frequency determined by the occurrence of events and the central and or peripheral device having data required to be transferred.

Chien teaches, in a system wherein a remote peripheral communicates with a central device, the above limitation (see paragraph bridging columns 4 and 5).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Canada with the above teachings of Chien. One of ordinary skill in the art would have been motivated to make such modification for the same reasons as mentioned above.

18. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Canada in view of O'Connor et al. (GB 2271691 A hereinafter "O'Connor").

Art Unit: 2182

19. Referring to claim 10, Canada teaches the system of claim 1, as shown above, and further teaches the peripheral device is a sensor. Canada fails to teach the peripheral device is in an anti-theft or anti-fire system.

O'Connor teaches, a system wherein a wireless peripheral device communicates with a control device, wherein the peripheral device is a sensor in an anti-fire system (see paragraph bridging pages 1 and 2).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to use the peripheral device in a anti-fire system because O'Connor teaches these types of components are useful to communicate alarm information to a central device to facilitate emergency procedures as suggested by O'Connor (see paragraph bridging pages 1 and 2).

20. Claim 14 and 15 are is rejected under 35 U.S.C. 103(a) as being unpatentable over Canada in view of Roberts et al. (U.S. Pub. No. 2005/0073991 hereinafter "Roberts").

21. Referring to claims 14 and 15, Canada teaches the method of claim 12, as shown above, however Canada fails to teach the synchronization phase comprises sending, by the peripheral

Art Unit: 2182

device which is out of synchrony, of a synchronization request (REQ_SYNC), said request being repeated till the reception, by said peripheral device, of an answer (SYNC) emitted by the network timing device, said request being always repeated at the same recovery frequency (rf), chosen from a group of frequencies at which said peripheral devices and said central device operate for the data transmission and reception.

Roberts teaches, in a system wherein wireless devices communicate with a central host, the above limitation (see figure 2 and paragraph 24).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the method of Canada with the above teachings of Roberts. One of ordinary skill in the art would have been motivated to make such modification in order to allow the device to be resynchronized at any time, rather than scheduled intervals thus reducing downtime.

22. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Canada in view of Roberts as applied to claim 14 above, and further in view of Chien.

Art Unit: 2182

23. Referring to claim 16, the combination of Canada and Roberts teaches the method of claim 14 as shown above. Canada further teaches that at least the peripheral device has a "sleeping state" wherein the transmitter and receiver are not supplied with power and an active state wherein both the transmitter and receiver are supplied with power.

The combination of Canada and Roberts fails to teach the peripheral device has a passive mode wherein the receiving unit is supplied and the transmitter is not supplied.

Chien teaches, in a system wherein a remote peripheral communicates with a central device, the above limitation (see paragraph bridging columns 4 and 5).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Canada with the above teachings of Chien. One of ordinary skill in the art would have been motivated to make such modification in order to be able to receive data, while still reducing battery usage as suggested by Chien (see lines 20-26 of column 3).

24. Referring to claim 17, Canada teaches the programming data is sent from the central device to the peripheral device and

Art Unit: 2182

teaches sending and receiving acknowledgement messages (see lines 9-28 of column 7).

Canada fails to teach receiving the programming data while in a passive state and transitioning to an active state to enable the sending of an acknowledgement message.

Chien teaches, in a system wherein a remote peripheral communicates with a central device, the above limitation (see paragraph bridging columns 4 and 5).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Canada with the above teachings of Chien. One of ordinary skill in the art would have been motivated to make such modification in order to be able to receive data, while still reducing battery usage as suggested by Chien (see lines 20-26 of column 3).

25. Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canada in view Ayyagari et al. (US Pub. No. 2001/0024434 hereinafter "Ayyagari") and further in view of Applicant's Admitted Prior Art (hereinafter AAPA).

26. Referring to claim 18-21, Canada teaches the wireless system and method of claim 12 as shown above, however Canada

Art Unit: 2182

fails to teach the wireless system uses the CSMA protocol, wherein the data packets include a header, source and destination address information, length, CRC data, auxiliary fields, variant fields and an auto-correction field, wherein the auto-correction field is encoded according to Reed-Solomon code, and wherein at least one field is ciphered by means of a symmetric algorithm.

Ayyagari teaches in an analagous wireless communication system, that it is common to use the CSMA protocol in a wireless system and the protocol is widely used because it provides for collision avoidance, and thus would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Canada with the above teachings of Ayyagari.

The applicant sets forth at lines 1-18 of page 12 of the instant specification, that the identified fields are standard in the CSMA protocol, therefore it would have been obvious to one of ordinary skill in the art to incorporate these fields in the data packets utilized in the Canada-Ayyagari combination.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eron J.

Art Unit: 2182

Sorrell whose telephone number is 571 272-4160. The examiner can normally be reached on Monday-Friday 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EJS

July 21, 2007

 *Sorrell* 7/21/07